



DOCKET: CU-1516

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Terumi Sunaga)
SERIAL NO: 08/820,608) Group Art Unit: 2661
FILED: March 19, 1997)) Examiner: K.Vanderpuye
TITLE: Spread Spectrum Communication Transmitter and Receiver and
CDMA Mobile Communication System and Method

THE ASSISTANT COMMISSIONER FOR PATENTS
Washington, D.C. 20231

CLEAN VERSION OF CLAIMS 18-20

18. A transmitter used in a CDMA mobile communication system comprising:
a pilot transmit unit further comprising:
a pilot data generator which generates pilot data;
a first modulator which modulates the pilot data;
a second modulator which spreads a spectrum of modulated pilot data
from the first modulator to thereby generate a pilot signal; and
a timing generator which generates a timing signal applied to at least one of
the pilot data generators and the first and second modulators so that
the pilot signal is intermittently transmitted; and
traffic channel transmit units which respectively transmit data signals in
respect of traffic channels.

19. A transmitter used in a CDMA mobile communication system as claimed in
claim 18, wherein said pilot signal has a period shorter than an interval in which the pilot
signal is intermittently transmitted.

20. A receiver used in a CDMA mobile communication system comprising:

RECEIVED
Technology Center 2600
SEP 21 2001

25

6

a pilot channel receive unit which demodulates pilot signals respectively transmitted intermittently in a spread spectrum formation by transmitters, and detects from the pilot signals, a timing for a traffic channel demodulation; and

a traffic channel receive unit which demodulates data at the timing detected by said pilot channel receive unit; and the timing detected by comparing peaks of the pilot signals intermittently transmitted, the timing for the traffic channel demodulation corresponding to a greatest one of the peaks.
